

**Amendments to the Claims:**

Please amend claims 1-6, 8-13, and 15-20 as shown in the LISTING OF CLAIMS below. Claims 7, 14, and 21 remain unchanged. The LISTING OF CLAIMS will replace all prior versions, and listings, of claims in the present application.

**Listing of Claims:**

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1. (currently amended) A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising:  
creating a list of public elements in said object-oriented library, each of said public elements including a sublist of all public hierarchically-related elements for that are a parent of the element; and  
storing said list.
2. (currently amended) The method of claim 1 wherein  
said object-oriented library is a Java™ package;  
said public elements comprise classes and interfaces; and  
said public hierarchically-related elements comprise public superclasses and public superinterfaces of said classes and said interfaces.
3. (currently amended) A method for representing an application programming interface (API) definition for an object-oriented library, said method comprising:

creating a public list including all public classes and interfaces in defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect superclasses of a class; and

storing said list.

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4. (currently amended) The method of claim 3 wherein said object-oriented library is a Java™ package.

5. (currently amended) A method for determining a program hierarchy, said method comprising:
- receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each of said public elements including a sublist of all public hierarchically-related elements for that are a parent of the element; and
- indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

6. (currently amended) The method of claim 5 wherein
- said object-oriented library is a Java™ package;
- said public elements comprise classes and interfaces; and

said public hierarchically-related elements comprise public superclasses and public superinterfaces of said classes and said interfaces.

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7. (original) The method of claim 5, further comprising comparing a first program hierarchy reconstructed from a first API definition file with a second program hierarchy reconstructed from a second API definition file; and indicating an error when said first program hierarchy is inconsistent with said second program hierarchy.
8. (currently amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to represent an application programming interface (API) definition for an object-oriented library, the method comprising: creating a list of public elements in said object-oriented library, each of said public elements including a sublist of all public hierarchically-related elements for that are a parent of the element; and storing said list.
9. (currently amended) The program storage device of claim 8 wherein said object-oriented library is a Java™ package; said public elements comprise classes and interfaces; and

said public hierarchically-related elements comprise public superclasses and public superinterfaces of said classes and said interfaces.

10. (currently amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to represent an application programming interface (API) definition for an object-oriented library, the method comprising:

creating a public list including all public classes and interfaces ~~in~~ defined in said object-oriented library, said public list including a class sublist for each of said public classes, each said class sublist including all direct and indirect superclasses of a class; and

storing said list.

11. (currently amended) The program storage device of claim 10 wherein said object-oriented library is a Java<sup>TM</sup> package.

12. (currently amended) A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method to determine a program hierarchy, the method comprising:

receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each of said public elements including a sublist of all public hierarchically-related elements ~~for~~ that are a parent of the element; and

indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.

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13. (currently amended) The program storage device of claim 12 wherein said object-oriented library is a Java™ package; said public elements comprise classes and interfaces; and said public hierarchically-related elements comprise public superclasses and public superinterfaces of said classes and said interfaces.
  14. (previously presented) The program storage device of claim 12 wherein said method further comprises:  
comparing a first program hierarchy reconstructed from a first API definition file with a second program hierarchy reconstructed from a second API definition file; and indicating an error when said first program hierarchy is inconsistent with said second program hierarchy.
  15. (currently amended) An apparatus for representing an application programming interface (API) definition for an object-oriented library, said apparatus comprising:

means for creating a list of public elements in said object-oriented library, each of  
said public elements including a sublist of all public hierarchically-related  
elements for that are a parent of the element; and  
means for storing said list.

16. (currently amended) The apparatus of claim 15 wherein  
said object-oriented library is a Java™ package;  
said public elements comprise classes and interfaces; and  
said public hierarchically-related elements comprise public superclasses and public  
superinterfaces of said classes and said interfaces.

17. (currently amended) An apparatus for representing an application programming  
interface (API) definition for an object-oriented library, said apparatus comprising:  
means for creating a public list including all public classes and interfaces ~~in~~ defined  
in said object-oriented library, said public list including a class sublist for each  
of said public classes, each said class sublist including all direct and indirect  
superclasses of a class; and  
means for storing said list.

18. (currently amended) The apparatus of claim 17 wherein said object-oriented library  
is a Java™ package.

19. (currently amended) An apparatus for determining a program hierarchy, said apparatus comprising:
- means for receiving an application programming interface (API) definition file for an object-oriented library, said API definition file including a list of public elements in said object-oriented library, each of said public elements including a sublist of all public hierarchically-related elements ~~for that are a parent~~ of the element; and
- means for indicating a first public element is a direct parent of a second public element when said first public element is represented in the sublist for said second public element and said first public element is not represented in the sublist for any other public element listed in the sublist for said second public element.
20. (currently amended) The apparatus of claim 19 wherein
- said object-oriented library is a Java™ package;
- said public elements comprise classes and interfaces; and
- said public hierarchically-related elements comprise public superclasses and public superinterfaces of said classes and said interfaces.
21. (previously presented) The apparatus of claim 19, further comprising
- means for comparing a first program hierarchy reconstructed from a first API definition file with a second program hierarchy reconstructed from a second API definition file; and

means for indicating an error when said first program hierarchy is inconsistent with  
said second program hierarchy.

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